

CHAPTER 7 ENVIRONMENTAL CONSIDERATIONS AND RESPONSIBILITIES

Section 1 Background

1. THE PUBLIC LAW. The following congressional acts and executive orders implemented through FAA regulations and orders require consideration and action by Flight Standards Aviation Safety Inspectors (ASIs).

A. *The Federal Aviation Act of 1958 (FA Act).* Section 611 of the FA Act, as amended in 1968, directs the FAA to provide present and future relief and protection to the public health and welfare by the control and abatement of aircraft noise. The FAA must consider whether noise abatement regulations are economically reasonable, technologically practicable, and appropriate for the particular type of aircraft.

B. *The National Environmental Policy Act of 1969 (NEPA).* This public law establishes a broad national policy to promote efforts for improving the relationship between human beings and their environment. The National Environmental Policy Act sets certain policies and goals concerning the environment and requires that to the fullest extent possible, the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with those policies and goals. The National Environmental Policy Act requires that all “major Federal actions” be evaluated for environmental impact through multi-disciplinary studies.

C. *Executive Order No. 11514.* This order, issued in 1970, directs all federal agencies to monitor, evaluate, and control their activities to protect and enhance the quality of the environment. This order also requires the review of regulations, policies, and procedures relating to licenses and permits. It further requires implementation of any corrective action necessary to ensure compliance and consistency with the National Environmental Policy Act.

3. ENVIRONMENTAL RESPONSIBILITIES. Flight Standards environmental responsibilities are stated in paragraph 1 of Appendix 4 of FAA Order 1050.1D,

Policies and Procedures for Considering Environmental Impacts. Normally, the district/field office responsible for the action is also responsible for the environmental assessment.

A. If additional aircraft operations will significantly impact the environment, certain procedural reviews which consider the “public need” must be accomplished before an operator’s operations specifications are issued or amended.

B. The FAA and its employees are also responsible for ensuring compliance with regulations and procedures established to protect and enhance the environment. The following sections provide direction and guidance for fulfilling Flight Standards’ responsibility with respect to the national environment.

5. AVAILABILITY OF ASSISTANCE. A thorough discussion on the subject of environmental and aircraft noise requirements is not possible within the framework of this handbook. Additional information is contained in FAA Orders 1050.13A and 1050.1D. ASIs should not hesitate to request assistance.

A. Assistance is available through the regionally assigned Noise Abatement Officer (NAO) (FAA Order 1050.11A) and Washington Headquarters staff personnel in the Office of Environment and Energy (AEE-110 and AEE-120).

B. Assistance on performance and aircraft noise considerations is available through the appropriate Aircraft Evaluation Groups (AEG’s) and AFS-300.

C. Regional flight procedures staff personnel can often provide assistance on departure and arrival procedures established for noise abatement purposes.

D. Questions concerning flight crew operational procedures for noise abatement procedures should be directed to Headquarters Flight Standards staff personnel (AFS-300).

Section 2 Aircraft Noise

1. PERTINENT REGULATIONS AND ORDERS

A. As a result of Section 611 of the FA Act, the FAA adopted FAR Part 36 (effective December 1, 1969), which establishes noise standards for issuance of aircraft type certificates and changes to those certificates and standard airworthiness certificates. To complement Part 36, the FAA issued FAR Part 91, Subpart E (effective January 24, 1977), requiring civil, subsonic turbojet aircraft over 75,000 pounds not meeting the Part 36 noise standards to be modified by January 1, 1985, if these aircraft are to operate at U.S. airports.

B. Special Federal Aviation Regulation No. 47 (SFAR 47, effective February 26, 1985) provides for limited issuance of special flight authorizations to conduct certain nonrevenue operations that are otherwise prohibited by the noise restrictions in Far Part 91, Subpart E. Permissible operations include flights to an airport for alterations to achieve noise compliance, exportation of the aircraft, and scrapping the airplane. These special flight authorizations are issued by the Office of Environment and Energy (AEE-1).

C. FAA Order 1050.13A establishes procedures and assigns responsibilities for aircraft noise compliance plans submitted by U.S. operators under Far Part 91, Subpart E.

3. FLIGHT STANDARDS RESPONSIBILITIES. As of January 1, 1985, all civil turbojet aircraft with maximum weights of more than 75,000 pounds that are U.S.-registered, have standard airworthiness certificates (or equivalent aircraft which are foreign registered), and operate into U.S. airports must have been shown to comply with Stage 2 or Stage 3 noise levels as specified in Appendix C of FAR Part 36. The showing of compliance, for aircraft issued original standard airworthiness certificates after the appropriate dates specified in FAR § 36.1, is accomplished during the aircraft certification process.

A. Operators of these aircraft automatically comply with Far Part 91, Subpart E aircraft noise requirements and no specific Flight Standards responsibilities are defined. Operators of aircraft issued original standard airworthiness certificates before the appropriate dates specified in FAR § 36.1 were required by FAR Part 91, Subpart E to make a specific showing of compliance or submit a compliance plan and status reports to the Office of Environment and Energy (AEE-1). Alternatively, the operator may apply for an exemption from that office.

B. Questions concerning a specific aircraft type or a specific operator's compliance status with FAR Part 91, Subpart E should be directed to AEE-110. In addition, AEE-110 will provide copies of compliance plans, status reports, and any exemptions upon request. With respect to aircraft noise and Far Part 91, Subpart E requirements, Flight Standards inspectors are responsible for the following:

(1) Any flight operation suspected of being in violation of Far Part 91, Subpart E. An investigation must be initiated and an Enforcement Investigation Report prepared if appropriate (see Order 2150.3, Compliance and Enforcement Program). Upon initiation of an investigation, AEE-1 and the Regional Flight Standards Division shall be notified. Assistance may be requested from these offices if considered necessary.

(2) When known, the Regional Flight Standards Division will be notified of any operator who has failed to submit the compliance plans and status reports required by FAR § 91.308. The Flight Standards Division will also be notified when it is suspected that an operator has failed to comply with his submitted compliance plan. The Flight Standards Division will, in turn, notify AEE-1 and Regional Counsel. ASIs inspectors will take action only when directed by the Regional Flight Standards Division in coordination with both the Regional Counsel and AEE-1.

(3) Surveillance of assigned FAR Part 121, 135, and 125 certificate holders (including Part 125 deviation holders) who operate Stage 1 aircraft under FAR § 91.301 to ensure the following:

(a) An appropriate exemption (either under FAR Part 11 or § 91.307) is aboard each aircraft.

(b) The operator continues to provide the AEE-110 with current compliance plan status reports as required by FAR § 91.308. Order 1050.13A provides additional information on required compliance plans and status reports.

(c) The operator is complying with all exemption restrictions, such as night curfews.

(d) District offices having responsibility for FAR Part 129 operators should conduct liaison and/or surveillance as necessary to determine compliance with the

Part 91 noise limits. Suspected violations must be investigated and an enforcement investigative report prepared, if appropriate.

(e) Surveillance of flight operations conducted under SFAR 47 to determine the following:

- A special flight authorization is on board the airplane during all operations at U.S. airports
- The operator is complying with all conditions and limitations established by the authorization
- The airplane has an appropriate airworthiness certificate or ferry permit to perform the flight

Section 3 Environmental Assessments

1. GENERAL. The National Environmental Policy Act and Executive Order 11514 require federal agencies to assess the potential impact which any major federal action will have on the environment. Order 1050.1D is the FAA's directive that implements the requirements of the National Environmental Policy Act and Executive Order 11514. This section describes situations where ASI shall prepare an Environmental Assessment (EA) and provides direction and guidance for following the appropriate environmental analysis procedures outlined in Attachment 2 of Order 1050.1D.

3. TYPES OF ACTION REQUIRING AN ENVIRONMENTAL ASSESSMENT BY FIELD INSPECTORS. Operations specifications authorize the use of specific airports for scheduled passenger-carrying operations. The issuance of an air carrier certificate or operating certificate and associated operations specifications, in addition to the amendment of current operations specifications, may significantly change the character of the operational environment of an airport. Thus, the ASI responsible for the issuance or amendment of certain operations specifications is also responsible for the preparation of the Environmental Assessment. Normally, the following situations will require the preparation of an Environmental Assessment:

- Amendment of any operations specifications authorizing an operator to use turbojet airplanes for scheduled passenger service into an airport not previously serviced by any scheduled passenger-carrying turbojet airplanes
- Issuance or amendment of any operations specifications authorizing an operator to use the Concorde for any scheduled/nonscheduled service into an airport, unless an environmental assessment for such service has been previously prepared
- Issuance of any operations specifications to a scheduled passenger-carrying operator to initially authorize the use of turbojet airplanes and to serve an airport not previously serviced by scheduled passenger-carrying turbojet airplanes

5. OFFICIAL RESPONSIBLE FOR ACCOMPLISHING THE ENVIRONMENTAL ASSESSMENT

A. Administrative procedures require the governmental official who finalizes the federal action to also decide what actions will be taken as a result of the environmental assess-

ment. In most cases, this official will be the assigned Principal Operations Inspector responsible for approving operations specifications that authorize airports for scheduled passenger service with turbojet aircraft.

B. Due to the varied and complex procedures used in determining whether a particular operation will have a significant impact on the environment, the Principal Operations Inspector must coordinate significant noise activities with appropriate offices. The Principal Operations Inspector or Certification Project Manager (CPM) will coordinate through the certificate holding regional Noise Abatement Officer with the affected geographic regional Noise Abatement Officer when an Environmental Assessment is required for operations at an airport outside the certificate holding region.

7. COLLECTION OF INFORMATION

A. To prepare an Environmental Assessment, certain types of information must be collected. When an applicant air operator is involved in the certification process, the Certification Project Manager is responsible for collecting the information from the operator. In other situations, the Principal Operations Inspector assigned to the operator is responsible for collecting the information from the operator. The operator shall be advised that this information is necessary for preparing an Environmental Assessment and that an Environmental Assessment is required before the operations specifications can be issued or amended.

B. The operator may prepare the Environmental Assessment or contract with another person to prepare the Environmental Assessment. The operator should be advised that the Environmental Assessment report must be prepared in accordance with Order 1050.1D. Most private contractors who perform this type of work are familiar with this order. The operator-prepared Environmental Assessment must be forwarded to the responsible ASI for processing.

C. The information that must be collected is described as follows:

- Proposed airports at which scheduled passenger turbojet aircraft service will be introduced

- Type aircraft and engines to be used
- Number of proposed scheduled passenger-carrying operations per day
- Number of proposed landing and takeoff operations during daytime (0700-2159 local) at airports to be served
- Number of proposed landing and takeoff operations during nighttime (2200-0659 local) at airports to be served
- Operator's long range plans (1 to 2 years) to include planned service expansion, planned changes to service to new airports, planned changes in flight frequency, and planned changes in daytime or nighttime scheduled passenger-carrying operations

9. PROCESSING THE ENVIRONMENTAL ASSESSMENT

A. Attachment 2 of Order 1050.1D identifies the environmental subjects and outlines the procedures to be used in preparing an Environmental Assessment. Normally, aircraft noise will be the primary subject of a Flight Standards Environmental Assessment to support the issuance or amendment of operations specifications.

B. Upon receipt of the operational information described in paragraph 1145, a noise analysis will be performed using the Area Equivalent Method (AEM) discussed in paragraph 1 of Attachment 2 of Order 1050.1D and in FAA Report No. EE-84-12. Assistance is available from both the regionally assigned Noise Abatement Officer and AEE-110/120. For example, the Certification Project Manager or Principal Operations Inspector may mail the operational information to AEE-110/120 with a request to perform the Area Equivalent Method noise analysis.

C. Generally, if the results of the Area Equivalent Method calculations show less than a 17 percent increase in the Decibel Noise Level (DNL) area contour, it may be concluded that the Federal action would not significantly change the operational environment of the airport and a Finding Of No

Significant Impact (FONSI) should be prepared. The preparation of the Finding Of No Significant Impact in accordance with chapter 4 of Order 1050.1D is the responsibility of the Certification Project Manager or the Principal Operations Inspector.

D. In the event that the Area Equivalent Method calculations show at least a 17 percent increase in the Decibel Noise Level contour, the FAA's Integrated Noise Model (INM) or an FAA-approved equivalent computer model will be used to perform a noise sensitive area analysis. Such events should seldom occur because more quiet and fuel efficient turbojet aircraft are being used to introduce or increase scheduled passenger service at small and medium hub airports. The Integrated Noise Model calculation may also be performed by AEE-120 and the results and recommendation would be provided to the Certification Project Manager or Principal Operations Inspector who would be responsible for preparing and coordinating the Finding of No Significant Impact which may be approved by the regional director or designee. An

Environmental Impact Statement (EIS) may be recommended by AEE-120.

E. In case of doubt as to whether an Environmental Impact Statement is necessary, the Flight Standards Division Manager or designee shall consult with the regional Noise Abatement Officer, AEE-1, and AGC-1. If an Environmental Impact Statement is required, the Flight Standards Division Manager or designee shall advise the operator and obtain any additional information necessary to prepare a draft Environmental Impact Statement. The new or amended operations specifications will not be issued until all issues and questions associated with the Environmental Impact Statement are fully resolved and the regional director has concurred with the issuance or amendment of the operations specifications. No decision on the proposed action can be made until 90 days after the Environmental Protection Agency has published a notice in the Federal Register for a draft Environmental Impact Statement or 30 days after publication of the notice for a final Environmental Impact Statement. (See Order 1050.1D for Environmental Impact Statement process.)

Figure 7-1 SAMPLE ENVIRONMENTAL IMPACT STATEMENT**DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION FINDING OF
NO SIGNIFICANT IMPACT FOR AMENDMENT OF OPERATIONS SPECIFICATIONS****TEE TAIL AIRWAYS, INC. TURBOJET OPERATIONS***A. Proposed Action*

Tee Tail Airways, Inc., commencing on or about January 1, 1988, proposes to operate twin engine turbojet Fokker F-28 1000 aircraft over certain of its scheduled passenger air carrier routes. The turbojet aircraft will supplement Tee Tail's current fleet of turbopropeller airplanes.

B. Environmental Considerations

1. All aircraft that will be served by Tee Tail's F-28 aircraft, except for Mount Rock Airport, Anytown USA, are currently served by scheduled air carriers with turbojet aircraft of equal or greater size.

2. Mount Rock Airport currently accommodates approximately 32,500 aircraft per year, of which approximately 2,490 are business jets that include Learjets, Gulfstream II's, Sabersliners, Westwinds.

3. Tee Tail Airways proposes to operate only one flight per day into Mount Rock Airport with F-28 aircraft.

4. All operations will be conducted in accordance with established noise abatement rules and procedures.

5. A draft compatibility study recently completed for Mount Rock Airport by Morey Associates, Oxon Hill Airport Consultants, relative to noise control and land use planning, does not indicate that the frequency of operations at present or anticipated in the near future are considered to cause a significant impact on the air and water quality, aesthetics, and/or social conditions. Additionally, construction, wetlands, flood plains, historic sites, coastal zones, and prime farmland considerations are not involved.

6. According to Advisory Circular AC-36-3B, the Fokker F-28 aircraft estimated DBA at maximum takeoff gross weight is 79.2. This is lower than many business jets and certain models of the B-737 and DC-9 aircraft which operate into most of the affected airports.

7. According to the Office of Environment and Energy Noise Abatement Division (AEE-100), a computer analysis for Mount Rock Airport disclosed that the 65 Decibel Noise Level contour would be increased by 6.5 percent from the addition of one F-28 aircraft flight per day. This is well within the limits established for a finding of no significant impact statement. The normal increase limit established for that purpose is 17 percent.

8. These flights will be operated during daylight hours only.

FIGURE 7-1 SAMPLE ENVIRONMENTAL IMPACT STATEMENT**DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION FINDING OF NO SIGNIFICANT
IMPACT FOR AMENDMENT OF OPERATIONS SPECIFICATIONS**

(Continued)

C. *Alternatives - No Action.*

This alternative was not considered appropriate in this instance.

D. *Conclusion*

After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in Section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and that it will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2)(C) of NEPA.

APPROVED: _____
REGIONAL DIRECTOR, XXX-1

DATE: _____

